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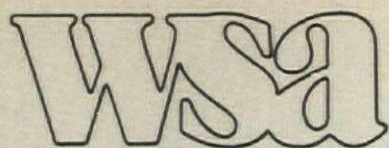


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Cover Credit  
Model of St. Luke's Hospital,  
Davenport, Iowa;

Joe Paskus/Photographer



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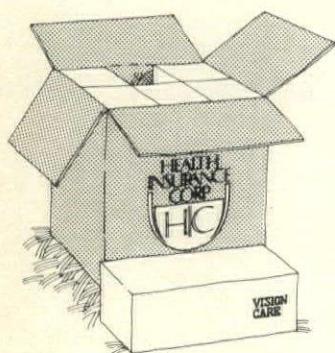
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## Health Care Costs

*By Eric Englund*

The decision by the Editorial Board of the WISCONSIN ARCHITECT to feature Health Care Facilities was initially made solely on the observation that health care construction, renovation, retrofitting, etc. continue to create great challenges to the architectural profession.

Since that initial determination, Governor Dreyfus and the Department of Health and Social Services have proposed a moratorium on all hospital and nursing home construction projects exceeding \$250,000 for the next two years. The announced purpose of this proposed moratorium is to provide "breathing time" to establish a maximum annual expenditure amount for all hospital and nursing home projects.

In a letter to Governor Dreyfus dated January 8, 1981, WSA President Walter E. Zoller, AIA expressed his concern that the proposed moratorium represents an unrealistic shotgun type of approach which does not directly deal with the underlying problem of rapidly rising health care costs. (Governor's response on page 53.) In that letter, Zoller suggested to Governor Dreyfus that the existing seven Wisconsin Regional Health Care Agencies have the necessary authority over construction of hospitals and nursing homes and that the creation of another layer of government would compound . . . not solve the problem.

The Hill-Burton Act of 1946, through favorable loan treatment, set the stage for massive hospital expansion after World War II. Some have argued that this



government assistance has led to the dramatic increase in hospital facilities. Interestingly, the cost of construction for health care facilities appears to be a minor portion of the overall expense when operating expenses can equal the cost of construction within 18 months.

Regulation appears to be a significant part of the action in the design, construction, and operation of health care facilities. One study has indicated that regulation of health care facilities results in a 25 percent cost increase.

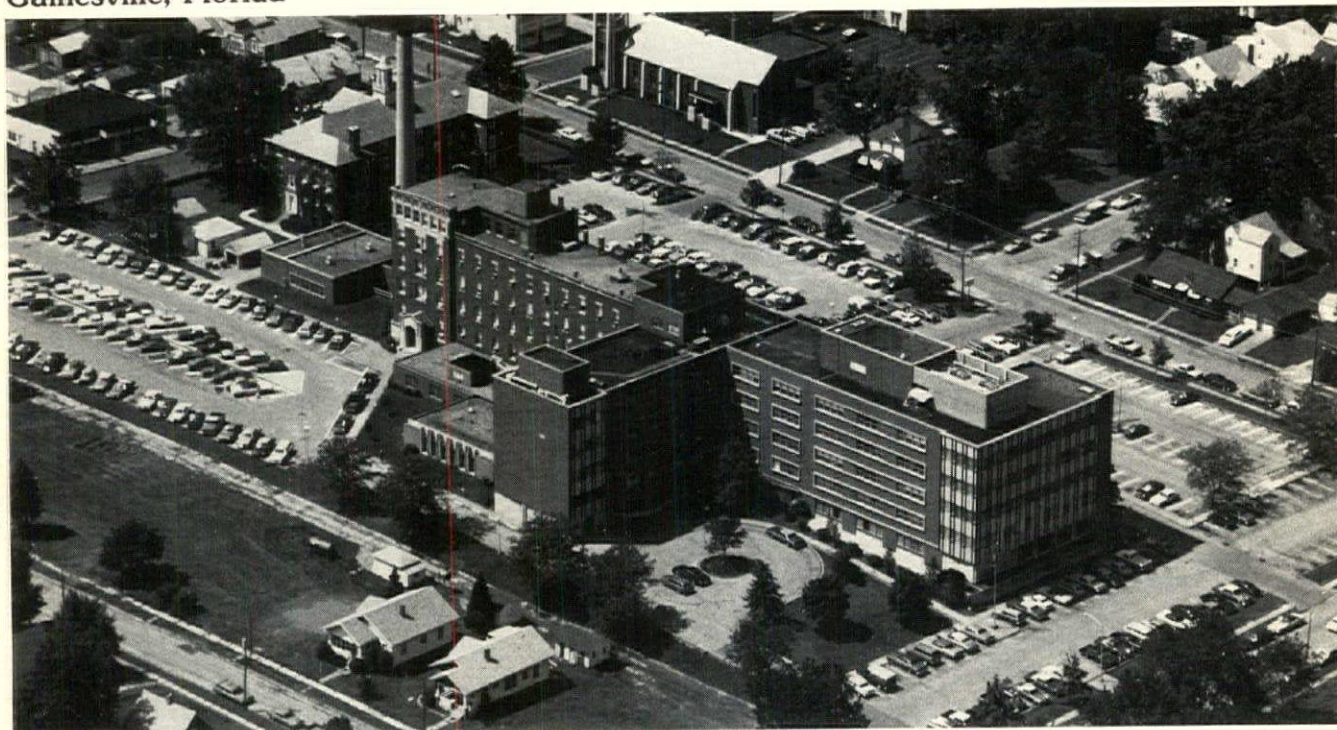
There appears to be little doubt that health care costs are experiencing a dramatic rise which must be checked in some manner.

The tough nut to crack is determining what action should be taken.



# Planning A Health Facility Renovation/ Addition Program

By Flad and Associates  
Madison, Wisconsin  
Milwaukee, Wisconsin  
Gainesville, Florida



Despite various isolated renovations/additions, St. Luke's Hospital, Davenport, Iowa, became architecturally outdated since its original construction in 1918. Ancillary services and nursing units were restricted within the compartmentalized, irregular structural grid. Functionally related departments were separated. (Photo by Joe Paskus)  
See cover for model of renovation.

"Lack of file space was our first indication that we had a problem. But we also had exposed hot water radiators. Our psychiatric unit was painted battleship gray and built of 1940's construction, creating an environment that was out of sync with contemporary psychiatric care standards. Our business offices and computer facilities were crowded. And cardiopulmonary services operated out of a single room," said James Sexton, president of St. Agnes Hospital, Fond du Lac, Wisconsin.

"Using their ingenuity, the assistant administrators identified alternative uses of space. Rooms were rearranged. Departmental space was exchanged. It wasn't enough. Finally, someone said we have so many problems, something must be done. We brought the team members in."

Between 1974 and 1977, a team of architects and engineers from Flad and Associates, Madison, Wisconsin and a hospital consultant led the administration through a major renovation/

addition project. Like St. Agnes Hospital, Rice Memorial Hospital, Willmar, Minnesota; St. Luke's Hospital, Davenport, Iowa; and nearly every other health facility require renovation at some time. Technological advancements, changing methods of patient treatment and new emphases on medical/social programs can impose new demands on the physical structure and its support systems, leaving the facility outdated or inadequate.



Many facilities, for example, lack adequate ambulatory surgery and recovery units to accommodate the recent growth of outpatient treatment. And new societal emphases on physical rehabilitation, geriatric care and chemical dependency programs may require the development of departments that never existed.

Thirty years ago, communities could more easily afford to expand, remodel or build new health facilities to meet increasing health care needs. Federal grant money provided in accordance with the Hospital Survey and Construction Act of 1946 (Hill-Burton Program) offset as much as 40 percent of costs incurred in the construction of health facilities. Even as recently as the early 1970's, an amendment to the Hill-Burton Program expanded federal assistance by providing direct loans and loan guarantees.

But Hill-Burton grants are no longer available to subsidize health facility construction and renovation. Owners must obtain their own funding. As construction costs and interest rates increase, justification for tearing down a 30-year-old facility becomes more difficult. Renovation/addition is a popular solution for expanding and updating facilities.

"Bandaging" is a typical response to the need for expansion or renovation. Additions are randomly tacked onto the building. Isolated internal areas are remodeled to update specific health delivery functions. Often, bandaging separates function-

ally related departments, crowds functions into compartmentalized spaces and creates a maze of interconnected rooms. Building engineering systems may be duplicated because departments requiring like systems are located at opposite ends of the building. The facility loses aesthetic continuity and operational efficiency.

Bandaging may alleviate immediate problems by providing more space or updating facilities. But what happens the next time departmental expansion is required? Will the department be conveniently situated on an outside wall to which adjacent space can be added, or will it be buried in the center of the building among complex departments? And what happens when that same department requires additional expansion in twenty years?

Health facility owners can avoid these dilemmas. Working with a team of architects, engineers and hospital consultants, the owner or administrator can develop a long-range program that defines both immediate and future renovation/addition needs. By conducting a series of major programming efforts, this team can synthesize the diverse needs of the facility and formulate a master facilities plan tailored to its specific requirements.

The first major programming effort is typically conducted by the owner or administrator and a consultant. They define the services that will be offered and the role of the health facility within its community. What are

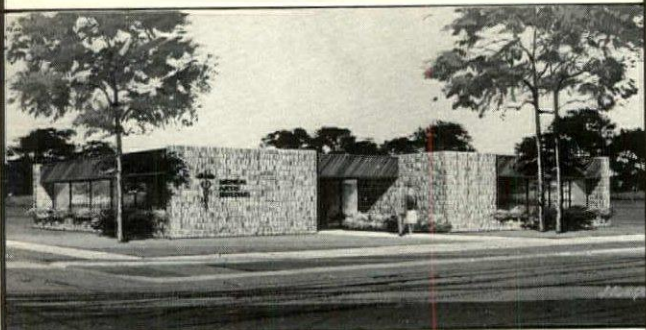
the socio-economic and demographic characteristics of the service area? How many people were served in the past, and what are projected populations? What demands exist for various services, educational programs and medical staff? What are the goals and missions of the owner?

While this Needs Determination is performed, the architects and engineers comprehensively assess the building and its space allocations, code deficiencies, and limitations to expansion and addition of services. Working with the architects and engineers, the owner or administrator can then determine the functional, operational and space needs of each department in relation to the service area's requirements for health services. These are documented in the Space Program, which lists the amount of space required for each room within the facility. The Space Program is prepared from analyses of utilization statistics; functional relationships of departments; current space allocations; circulation and traffic patterns; access to horizontal and vertical transportation; and communications, supply, environmental and equipment space needs.

Physical deficiencies and code violations are identified in the Physical Plant Evaluation, which is conducted at the same time as the Space Program. In this general review of the obsolescence of the building, the architects identify restrictions of the building configuration and the engineers determine the life



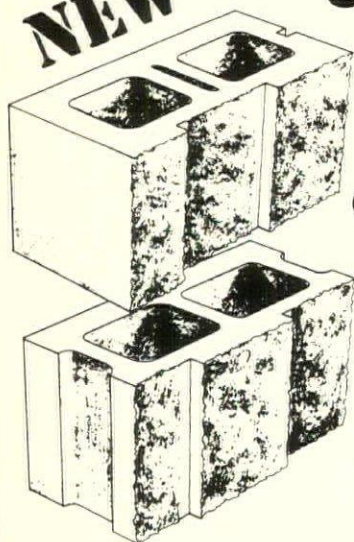
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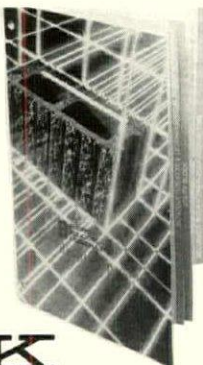
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expectancy and capacity of mechanical systems. In combination, this information defines the limitations to renovation/addition.

Limitations include fixed physical characteristics of the building such as site, exterior walls, column and bay spacing, structural capacity, floor-to-floor heights, and location of horizontal and vertical transportation. Environmental and equipment support systems and capacity of utilities can restrict renovation/addition in some areas of the building.

Architectural firms need to perform energy systems analyses to evaluate consumption and conservation. Renovation/addition projects can be tailored to the most efficient use of energy in that specific facility.

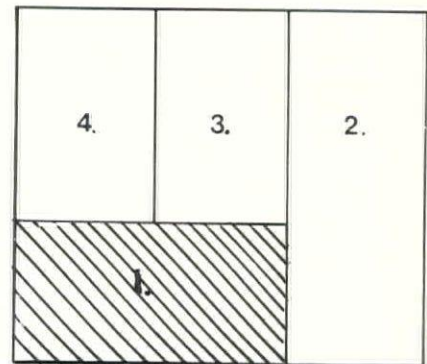
The findings of the Needs Determination, Space Program and Physical Plant Evaluation provide the basis for the Master Plan. From this programming effort, architects prepare the first drawing of facility renovation/addition plans. The schematic block diagram shows location, shape and size of departments; departmental relationships; space allocations; proximity of functions to engineering systems and facility circulation. The Master Plan includes solutions for both immediate and future renovation/addition needs.

Even more, the Master Plan indicates how renovation/addition needs can be accomplished without discontinuing health facility operations. By phasing the procedure into a series of construction projects and sequencing those projects throughout a given time period, the architects and engineers can maintain continuous operation of all departments during the entire renovation/addition process. More detailed time schedules prepared at a later date can be used to notify staff members of upcoming renovation/addition procedures affecting their departments.

Continuous operation of all departments within the facility is essential to provide adequate services to the area, as well as prevent a loss of revenue caused by temporarily turning away patients and physicians. Therefore, they utilize many renovation/addition concepts that allow total operational capability. These planning concepts are often used in part or in combinations to produce the required results.

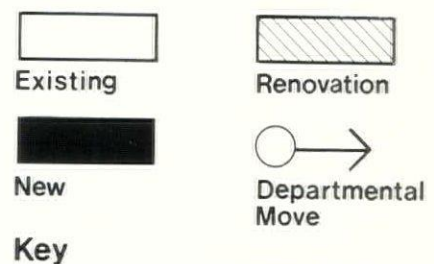
One planning option available to architects and engineers is to remodel within existing, inhabited space (see fig. 1). The function that occupies that space is compressed into a portion of the area, allowing continued operation of the department. Dust-proof, temporary partitions divide the room while the now unoccupied space is remodeled. The function is then moved into

the renovated portion, and the unoccupied space is remodeled. Finally, the function is allowed to use its finished area.



1 Initial Renovation  
2,3,4, Subsequent Phasing

Fig. 1

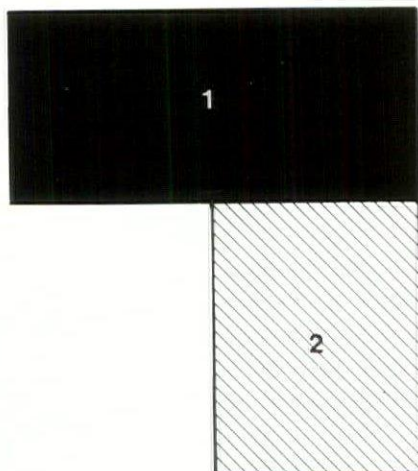


Phased remodeling of an existing, inhabited area is one of the most difficult renovation techniques with which health care facility personnel must deal. The function is confined and personnel must perform in restricted space. Renovation should be completed as quickly as possible, even if it requires working at night when health care activity is limited.



*Flad and Associates, headquartered in Madison, Wisconsin, and has additional offices in Milwaukee and Florida.*

A second planning option is used to expand as well as remodel (see fig. 2). An addition is built adjacent to the department that requires renovation. The department is moved from its original space into the addition, where it continues to operate. The original area is remodeled, and the department is redistributed throughout the new and renovated areas.



1 Finish Addition, Move In  
2 Renovate Vacated Space

**Fig. 2**

A more extensive form of phased remodeling is used when many adjacent departments require renovation as well as expansion. This concept is called "leap-frogging". Although the number of construction phases needed to complete the project is greater than in remodeling within an existing, inhabited space, leap-

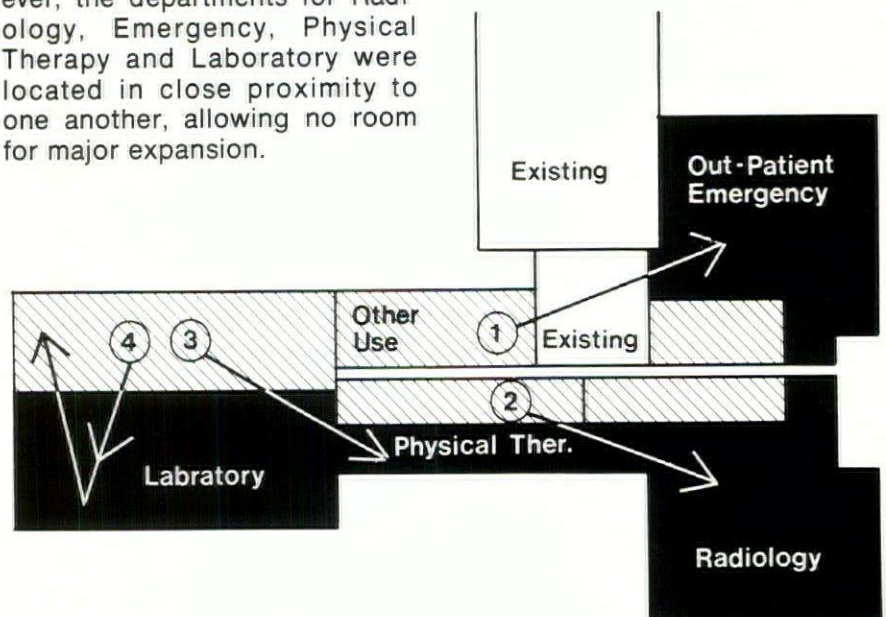
frogging is much less disruptive and easier to accomplish.

Leap-frogging is based on a simple process: build new space, move departments into the new space, thus creating an empty area, remodel the empty area, move a new occupant into that area, thus creating a new empty area. The procedure continues.

At the West Allis Memorial Hospital, West Allis, Wisconsin, four major departments required expansion and renovation. However, the departments for Radiology, Emergency, Physical Therapy and Laboratory were located in close proximity to one another, allowing no room for major expansion.

Flad & Associates applied the leap-frogging concept to its renovation/addition plan. An addition large enough to accommodate an expanded Out-Patient/Emergency Department was built onto one side of the hospital (See Fig. 3). This allowed Emergency to move in, creating empty space for other remodeling.

Concurrently, another addition was built opposite the new Emergency Department. Radiology moved into this addition, creating more empty space within the building.



### Construction Phases

- 1 Emergency moves to Addition/Renovation
- 2 Radiology moves to Addition/Renovation
- 3 Physical Therapy moves to Addition/Renovation
- 4 Laboratory moves to Addition, then back to Renovation

**Fig. 3**



Subsequent additions and remodeling allowed for relocation of Physical Therapy and expansion of Laboratory. In this manner, all four departments were updated and expanded, while keeping them operational. Planning methodologies were similarly used at the Lorain Community Hospital, Lorain, Ohio.

Mechanical systems capable of supporting both the new and renovated areas of the West Allis Memorial Hospital were built into the additions. Since the additions were built before the adjacent renovations were performed, the engineering services for both new and remodeled areas were ready to operate before the renovation began.

Architects and engineers also employ renovation/addition methods that are specifically designed to improve operational efficiency, thus reducing labor costs. For example, the St. Francis Hospital, La Crosse, Wisconsin, contained one 24-bed nursing unit that required moderate renovation and one 17-bed nursing unit that needed extensive renovation. These units connected to form a "T" shape. In each nursing unit, patient beds were located on both sides of the corridor and the nursing station and support services were situated on outside walls — valuable space for expansion (see fig. 4).

The expansion of space required to bring each patient bedroom in the 17-bed unit up to code would have reduced the number of beds in that unit to about ten. Simple renovation within each patient bedroom would have left the hospital with two separate nursing units serving a total of only 34 beds. These units would have required separate staffing, support functions and mechanical systems.

To create a more efficient nursing unit, the architects and engineers chose to remodel the 24-bed unit and convert the 17-bed unit into space for another function. An addition of patient bedrooms was built adjacent to the nursing station and support services, and the original outside wall was modified. The old patient bedrooms were remodeled, and the support services and nursing station were updated and expanded to accommodate the increased patient load.

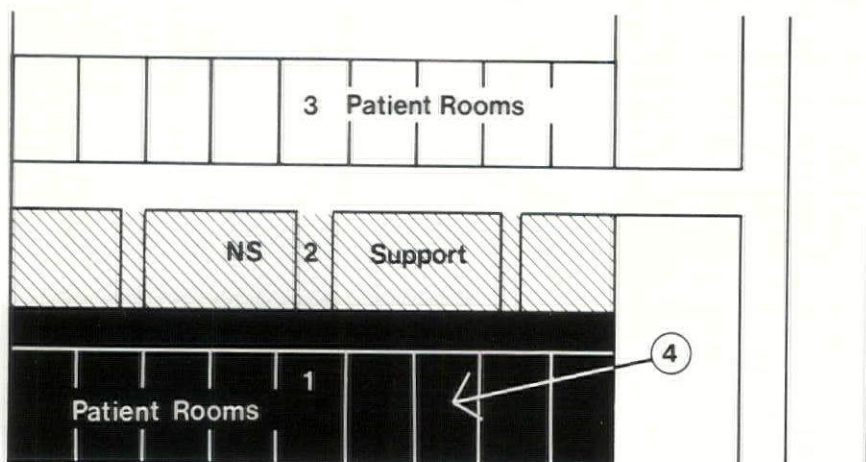
This renovation/addition planning concept created one efficient, 40-bed nursing unit. Both the nursing station and support services were located in the middle of the unit for easy access to all patient bedrooms. A similar plan was used to renovate and expand St. Luke's Hospital.

A health facility renovation/addition plan calls for upgrading the entire building. Although concentrated efforts are placed on

those areas requiring major renovation or expansion, minimal remodeling is typically performed on adjacent areas of the building. By upgrading the cosmetics of these areas with new paint, better lighting or new plumbing fixtures, the adjoining space can look as attractive as the remodeled space.

Renovation/addition programs also incorporate options for future expansion and modification. Where possible, hard space areas (permanent facilities of heavy investment and complex systems) are surrounded by soft space areas (unencumbered areas such as locker storage and conference rooms). If the hard space functions require future expansion, the soft space can be cannibalized at little expense. Hard space functions can be built on outside walls to allow easy exterior expansion. And facility services can be congregated in discrete areas of the building rather than in walls to provide flexible partitioning that can easily be removed during renovation. (See fig. 5).

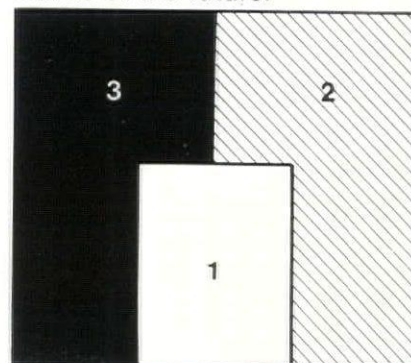
Health facility renovation/addition is a complicated procedure containing variables as extensive as facility designs. But with the help of an architect and other team members, a health care facility owner or administrator can explore the available options and select the renovation/addition program that best serves the facility's needs. Renovation/addition requires detailed planning not only for the present, but for known and unknown demands of the future.



- 1 Add Bedrooms & Corridor
- 2 Renovate for Support Space in Phases
- 3 Renovate Existing Bedrooms
- 4 Move Patients into New Addition

**Fig. 4**

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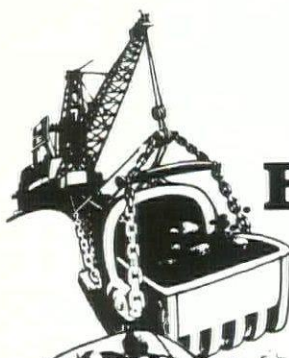


- 1 Soft Space (1) to be used for Future Development of 2 and 3

**Fig. 5**



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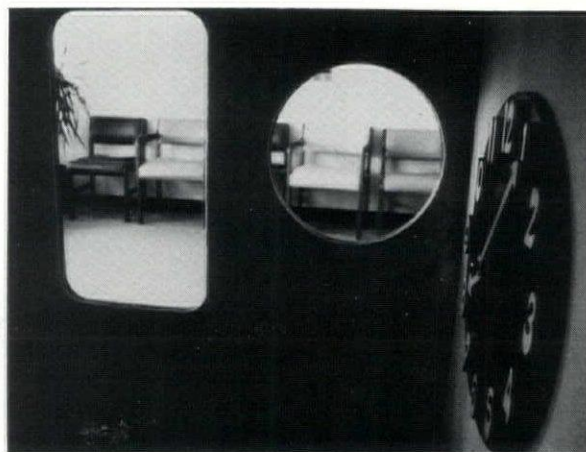
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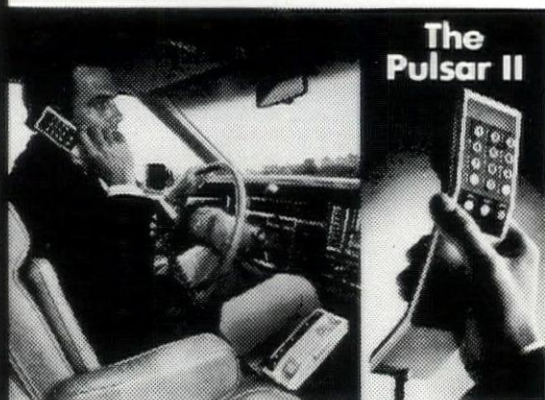
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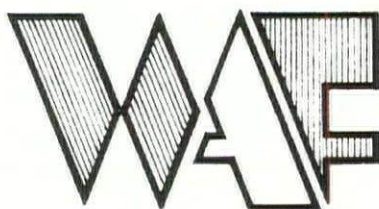
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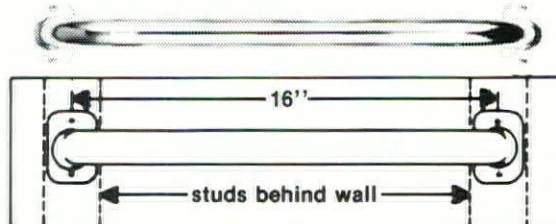
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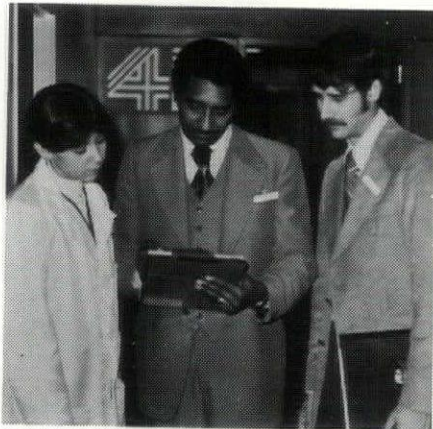
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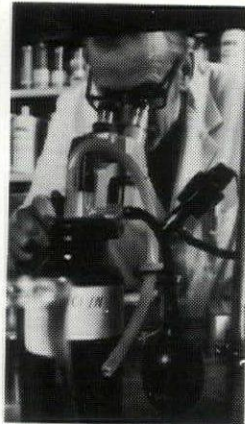
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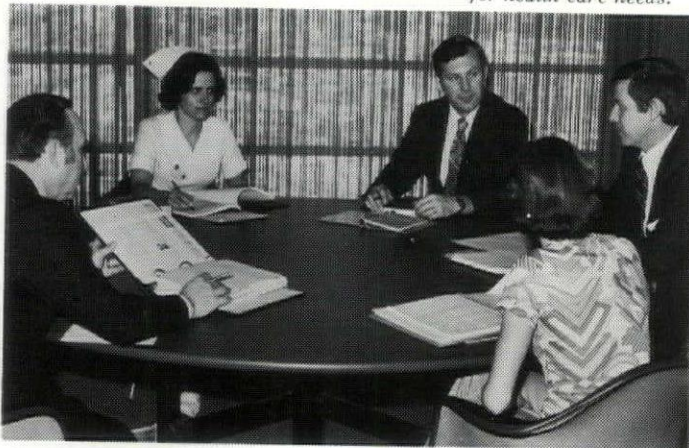
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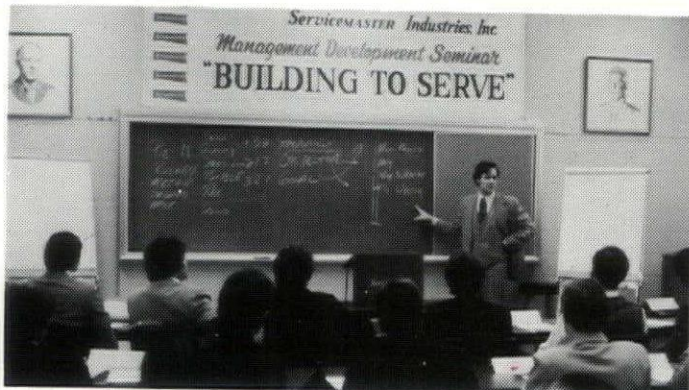
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# Living Facilities For The Elderly

By Architects III,  
Milwaukee, Wisconsin

Meeting the many needs of the elderly in the planning, design and completion of healthcare and residential facilities is no longer just desirable. It is demanded by a growing number of senior citizens who insist that their continued quality of life must include dignity, security and comfort.

And that demand underlines the fact that both owner and architect must combine their efforts and talents from the outset to meet the wishes of the individuals who ultimately pay the bill, the persons who occupy the facilities. A policy statement from Architects III of Milwaukee is pertinent: "It is the client who must ultimately live in the structure. Whatever its purpose, the structure must meet the client's need. All of the architect's work flows from that need. It is not his role to build monuments, but to fulfill human needs."

The institutional look of facilities from the past is foreign to what is wanted today by owners, architects and users. This appearance does not match an "atmosphere of caring". More than this is deserved by the frail, the handicapped, the ill — those who occupy such facilities for long periods of time. There must be a feeling of warmth, belonging and individual importance.

While design must consider individual preference, it also must gain efficiency for management and the best uses of space and manpower to keep costs in line. The variety of services available must be studied during the planning stage. Departments having similar or overlapping

functions should be located near to each other or should be consolidated. Traffic flow must be efficient. Space must be used and reused rather than remaining idle.

Retaining the sense of individual living embraces many considerations. In one project of Architects III, that feeling is strengthened through building exteriors which are broken into smaller segments, as are the interior corridors. Personal balconies add to this appeal. All buildings are connected, allowing complete interior movement throughout the complex in a barrier-free environment.

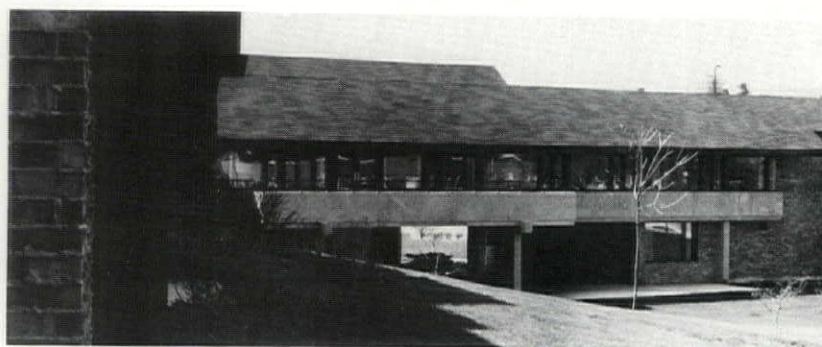
Other elements in the project which add to the sense of individuality include lively colors which work in harmony — short of being garish or dull. Wide, bench-like windowseats and lounge areas offer residents the chance to rest or stop off for a bit of conversation. A spacious dining room is well lighted for the elderly diners, and first-class appointments add a touch of elegance. In another area, groups may gather about a fireplace at

their regular meetings or to discuss common interests. Ancillary facilities include a grocery store, gift shop, game room, craft and activity rooms, beauty salon and wood working shop. Mail rooms, tenant storage area and indoor parking add to the appeal. Nurses are on call, security is strong, fire protection is modern and effective temperature controls assure summer and winter comfort.

Livability has a multitude of facets which must be scaled to meet human needs. Details such as window placement must be weighed carefully since small irritations can be magnified over a period of time. In a rectangular room, a window should be on the long rather than a short wall so that the window is shared and its control is not dominated by the person in the bed nearest the window. Such an arrangement would allow a privacy curtain between two beds. And if a bit of space were added, wheelchairs could be positioned near the beds so that patients could help themselves, resulting in less demand for help from nurses.







Other problems can be eliminated through thoughtful planning. Mirrors in rooms should be on side walls so that patients are not forced to look at themselves hour after hour. Dining tables are small. Smaller dining groups encourage more personal interaction and afford a greater choice of dining com-

panions. For the same reason, others prefer that "family" rooms be sized for a limited number and that furniture be arranged to accommodate smaller rather than large groups.

A recent tour through a facility for the elderly which is now at capacity showed the value of sensitive study during advanced

planning. Residents were using the facilities at full tilt and they were cheerful, friendly to each other and to visitors. They were enjoying these, the advanced years of their lives. Perhaps part of the reward for conscientious planning teams is found in statements such as that of a frail but still lovely resident: "We're lucky to have all of this."



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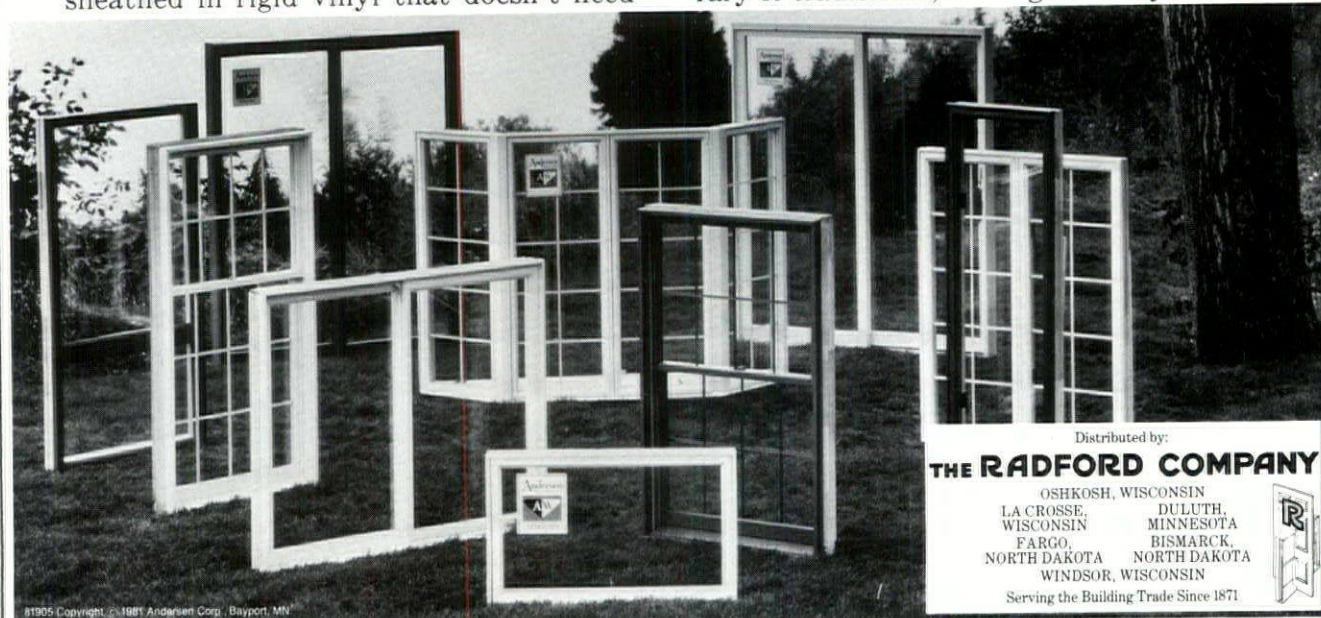
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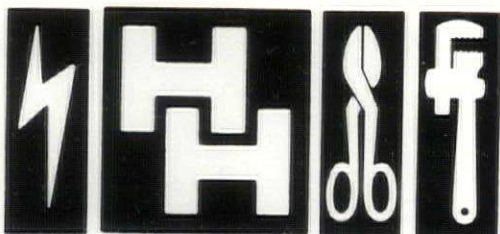


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# The New Jackson Clinic Madison, Wisconsin

By HSR Associates  
Madison and La Crosse, Wisconsin

The new downtown clinic facility is a quantum step in the planned growth of the Jackson Clinic, which started over 50 years ago. When it moves down the street from its present location, the Clinic will leave with the history of excellent medical care delivered in a building that is now 25 years old and was designed for half of the number of physicians using it. It will also move from a facility that was designed for medicine 25 years ago, to one that is designed for medicine today.

The new building, the new program, and the new site all presented significant challenges to the Building Committee, the Boards of the Jackson Clinic and their neighbors, the Methodist Hospital Board, as well as the design/build team of HSR and Orville E. Madsen and Son, Inc.

The program included a full service laboratory, a full service radiology department, a pharmacy, an optical retail operation, and parking for 500 vehicles. It also required cooperation between Methodist Hospital and the Jackson Clinic for the solution of the site which, as a given in the program, was to make the parking lot "disappear". Working as part of a design/build team with contractor Orville E. Madsen & Son, Inc., the architects, HSR Associates, were faced with the task of meeting an extremely limited cost budget, a significantly constrained site, and a delivery schedule which called for the opening by the Spring of 1982, as well as a previously developed program which was limited to 70,000 square feet.

The architects accomplished this by analyzing the needs of the clinic in terms of each piece and then assembling those pieces in a dramatic yet financially feasible manner.

The parking for both the hospital and the clinic was resolved to be below grade because of requirements and reactions of the neighborhood where there was substantial objection to having parking visible, and also to be consistent with the desires of the clinic for its patients as they utilize the area. The solution was to take the parking, camouflage it by the use of berms around the site, and to advantage the new DILHR Code Section 62 which defined open parking structures. The designed parking was stepped back from the streets so that the profile of the parking would not be the main element but rather would act as a base for the much taller clinic. The depth of the parking ramp was limited by the water table which was encountered 25 feet below the surface. Thus, the solution for parking was limited both on the surface because of visibility and below by the presence of water. Therefore, the parking was snuggled into the site under and adjacent to the new clinic and then capped off with roof gardens and pedestrian access areas which contain heavy landscaping. To further enhance and camouflage the parking, the entire perimeter and exterior of the clinic and hospital parking ramps was faced in brick.

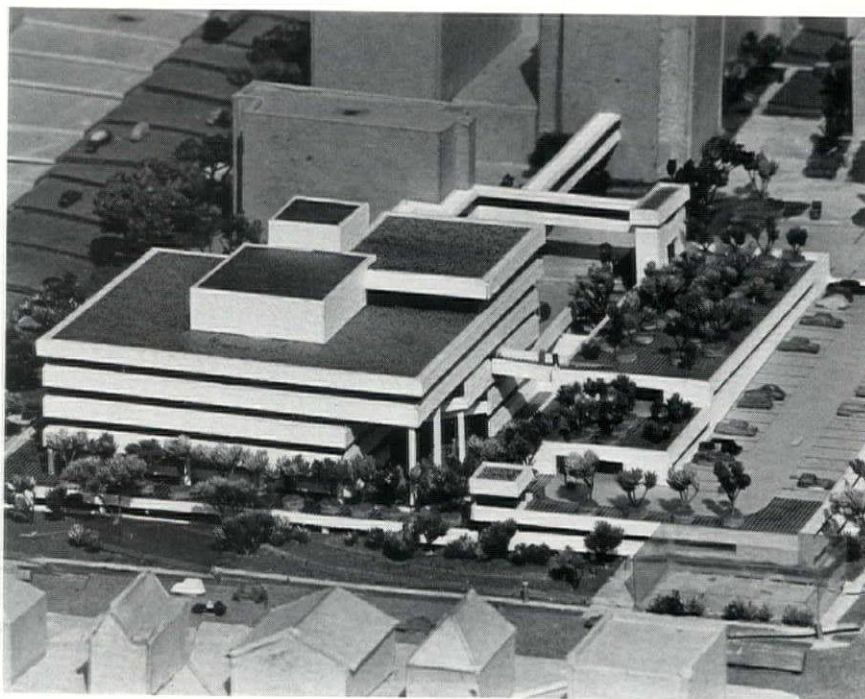
The Jackson Clinic facility was designed principally to serve the patients of the 50 physician

multi-speciality group practice who provide on site primary care and secondary and tertiary medical services which would be providing support for both the downtown facility as well as two satellite offices on the east and west sides of Madison. In addition to this basic program, the clinic also directed the architects to provide a facility which was expandable to at least 75 physicians. This requirement also had a significant impact on the site planning. It was determined early on, because of the conflict between the underground parking and the cost of supporting future construction, that expansion would be provided vertically and the structure prepared for that expansion. Thus, the facility in its final form will be expanded to a six-story building over the present four and a half levels.

The form of the Jackson Clinic is a result of the assemblage of each of the departments based on the concept of a four-quadrant floor plan with each department occupying a quadrant or multiple quadrants. The building is organized such that no two floors are identical. The organization of the floors provides a strong visual impact as the entrance overhang and the rear courtyard overhang both dictated by floor layouts give the building its dynamic and dramatic appearance. The front entrance overhang, a three-story overhang formed by the floors above, will provide the arriving patient visitor the feeling that he is within the clinic while he is still in his automobile, a purpose significantly designed in consideration of the environment and the elder-



ly patrons of the clinic. Once inside the clinic, strong consideration was given to the simplicity of graphics and lighting systems. These two decisions were the outgrowth of the reality that the building would have to be multiple levels. Significant analysis went into determining interdepartment and intradepartment relationships that would be required. Several factors were considered, including the patient flow between departments, the physician flow between departments, and the physical ease for the patients as they flow within the department. It was determined that the two largest primary care departments of Medicine and Ob-Gyn would be placed together on the same floor as the Laboratory for the ease of patients visiting this area. It should be noted that it is the procedure of the Jackson Clinic that all visiting patients who are scheduled or required to have laboratory tests or x-rays receive them on the same day as their initial visit. This procedure reduces the impact, not necessarily on the cost of providing services, but on the cost to the patient in traveling to and from the Clinic. The Medicine and Ob-Gyn Departments and the Laboratory were located on the fourth floor to facilitate future expansion of these departments. The third floor contains the Radiology Department as a major element on the floor. It has direct access and is contiguous with both the Orthopedic area and the Urology Department. Because of the obvious requirement for x-ray utilization by both of these departments, they became a cornerstone for the third floor



development. In addition, there is a Urology Diagnostic X-Ray Room which will be staffed by Radiology personnel, but will be primarily for the use of the Urology patient, thus reducing the amount of overlapping services and redundancy of visits for the Radiology patient. Also on the third floor is the Dermatology Department. Their offices are located under a major overhang formed by the upper floors where they receive direct southern exposure; however, the sunlight is controlled. Although the dermatologist is primarily using artificial lighting for diagnostic purposes, this location is still a benefit to him and his patients. Rounding out the third floor is the Neurology Department.

On the second floor are located Surgery, ENT, and Ophthal-

mology Departments. Also on the second floor is the main administrative area of the clinic. The computerized billing department is located here with the potential for future inhouse computer placement. It was determined that the inpatient screening for the Immediate Care Clinic would be on the first floor for the obvious reason of accessibility. Because of the possible growth of this department, it was given an area with the greatest growth potential. In addition, sharing the first floor are the administrative offices of the clinic and the Pediatrics Department, located near and accessible to the front entrance to reduce the number of children circulating throughout the clinic. The Medical Records Department is contained on the third floor and is serviced by the use of a dumbwaiter system for vertical transportation



of medical files. The building services are located on the second floor and accessible by means of a bridge for deliveries.

An enclosed skywalk system emanates from the fourth floor of the clinic and provides horizontal pedestrian transportation from the clinic to the hospital and the Methodist Parking Ramp. In the future, a connector to the adjacent block, which contains a nursing home and elderly housing, will be added to the skywalk system.

The design/build team responded to the compactness of the site and the schedule of the owner by fast tracking the building foundations in the form of the two levels of parking beneath the clinic building. These parking levels are accessible both through the front drive-thru drop-off area under the overhang at the main clinic entrance, and through the adjacent Methodist Hospital Parking Ramp. The total project consisted of four phases (Methodist Hospital parking, Jackson Clinic parking, Jackson Clinic building, and skywalk system) defined not only for the purpose of separate ownership, but for cost control, construction phasing, and expediting of State and local approvals. This methodology allowed the design/build team to fit the program into the configuration of the building as the lower parking levels were being constructed.

To achieve maximum floor area, floor to ceiling space for mechanical systems, and to economize construction costs by

limiting concrete slab thicknesses, concrete columns and post tension slabs comprised the structural system. Openings through the post tensioned slabs were carefully laid out and organized for the medical/plumbing/electrical requirements of the building.

The major mechanical and electrical systems were housed in a penthouse which will become the service center of a doughnut as the building expands. In addition, there is an electrical room and communications room on one level of parking below the clinic. Utilizing central vertical supply systems, the full scope of amenities normally considered for a medical facility such as communications, patient record distribution, and specialized equipment installation, was easily integrated into the building with major consideration for the ease of maintenance, function, and future growth.

The exterior of the building responds to both the tightness of the site, the short construction schedule, and the architecture of the surrounding buildings. Although it was impossible to match the form and texture of all of the adjacent buildings, the exterior precast epoxy panels and aluminum window systems will match existing detailing on the Methodist Hospital building immediately to the east. The horizontal expression of the window spandrel panels was utilized to give ultimate flexibility of window locations in the building. Matched with the precast epoxy panels, the lines of the

clinic facility will carry forth one visual image when looking up West Washington Avenue past the existing Methodist Hospital toward the Capitol.

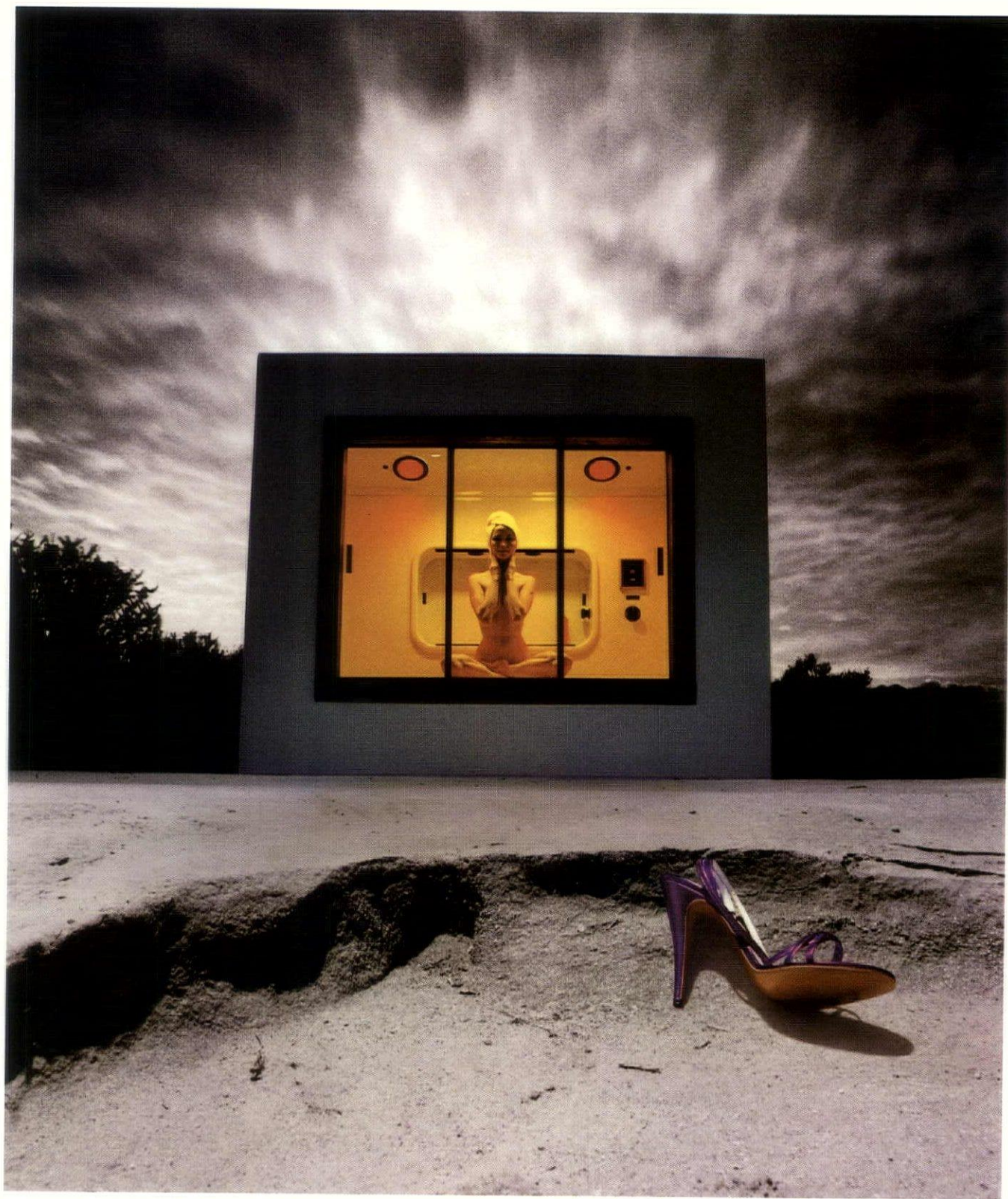
The use of the precast epoxy panels with significant offsets provides two effects: one, it allows more than ample space to install building insulation; and two, it provides for the overhangs at the east and west building faces for sunshading for energy reasons. Passive design of solar energy was considered throughout the facility and window areas and window locations developed accordingly. However, because of the function of the site, the main entrance faces north. A double locked vestibule is provided at the main entrance with automatically operating doors for ease of patient access.

The entire Jackson Clinic structure is designed with multiple objectives, pulled together by the diligence of the design/build team. In essence, the patient will be provided a non-institutionalized building with comfort of scale and texture and ease of circulation; the physician, an efficient building from its initial cost as well as the value of the building through the years — not only in the systems cost and operating costs, but in the efficiency of physician circulation; and the architect was given the opportunity to work on a major dramatic building in the continuing revitalization of downtown Madison.

*HSR Associates maintains offices in La Crosse and Madison.*

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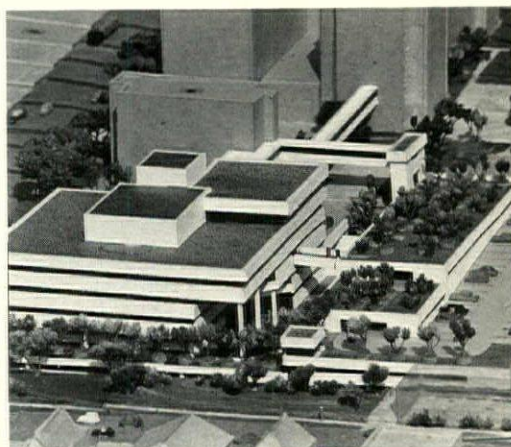
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# **"CONSTRUCTION TEAMWORK CAN ASSIST HEALTH CARE FACILITIES TO DERIVE DEPRECIATION BENEFITS"**

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By William J. Neiman

In the course of the final count-down in completion of construction on a major health care facility, more times than not, the owner will come up with a request for a finer breakdown on the project cost than that which has sufficed all during the construction period.

These requests at the eleventh hour, besides being untimely, may cause the construction team of Architect, General Contractor and Sub-Contractor additional hurdles to be vaulted to complete the project.

"Why now?" you ask. "Why not at the onset of this undertaking?"

The answer to this query is; the operational aspect of the owners management team has now been introduced to the task of properly deriving the benefits which generally can be obtained

through compliance with the regulations which govern the legislative incentives afforded health care facility on new construction.

These benefits and subsequent regulations can be divided into two classifications, those which concern taxable facilities and those which concern non-taxable facilities.

The non-taxable health facilities, which are non-proprietary institutions, or further; hospitals usually operated as a community service facility which do not distribute their earnings to stockholders, are able to derive benefits from compliance with the regulations which are prescribed by "third party" agencies. These agencies reimburse such facilities for reasonable and provable expenses expended in furnishing services to patients covered by their respec-

tive programs. The major "third parties", of course, are the federal government in the functioning body of Medicare, state programs, and insurance company programs.

The benefits to be derived from these "third parties" are in the form of additional reimbursements for depreciation expenses when such depreciation is maximized through componentization of the newly constructed facility.

Componentizing is the apportioning of total costs of a facility (usually new structures) to the various individual items which comprise the total facility.

Perusal of table 1 of the American Hospital Association's "Estimated Useful Lines of Depreciable Hospital Assets" indicates the refinement that can be achieved and the resultant shortening of the life of the total facility.



**TABLE 1**  
**Estimated Useful Life of Land Improvements,**  
**Buildings, and Fixed Equipment**

**LAND IMPROVEMENTS**

	Years
Fencing	
Brick or stone .....	25
Chain link .....	15
Wire .....	5
Wood .....	8
Flagpole .....	20
Paving (including roadways, walks, and parking)	
Asphalt .....	15
Concrete .....	20
Gravel .....	5
Retaining wall .....	20
Shrubs, lawns, and trees .....	10
Sign .....	12
Turf, artificial .....	5
Underground sewer and water lines .....	30
Yard lighting .....	15

**BUILDINGS**

Boiler house .....	25
Garage	
Masonry .....	25
Wood frame .....	15
Masonry, reinforced concrete frame .....	40
Masonry, steel frame, fireproofed .....	40
Masonry, steel frame, not fireproofed .....	30
Masonry, wood frame .....	25
Multilevel parking structure, masonry .....	25
Residence	
Masonry .....	25
Wood frame .....	25
Storage building .....	20

**FIXED EQUIPMENT**

*Building Services Equipment*

Electric lighting and power feed wiring .....	20
Conduit and wiring .....	20
Fixtures .....	10
Transformer .....	20
Switch gear .....	20
Elevator	
Dumbwaiter .....	20
Freight .....	20
Passenger, high-speed automatic .....	20
Passenger, other .....	20
Central television antenna system .....	15
Central clock system .....	20
Heating, ventilating, and air conditioning system .....	20

*Building Services Equipment (cont'd)*

Air conditioning system, all equipment and units	
Large — over 20 tons .....	15
Medium — 5 to 15 tons .....	10
Small — under 5 tons .....	8
Boiler .....	20
Compressor, air .....	15
Condensate tank .....	20
Condenser .....	15
Controls .....	20
Cooler and dehumidifier .....	10
Cooling tower	
Wood .....	15
Metal .....	15
Duct work .....	20
Fan, air handling and ventilating .....	15
Filter .....	15
Furnace, domestic type .....	15
Incinerator, indoor .....	20
Oil storage tank .....	20
Piping .....	25
Precipitator .....	15
Pump .....	15
Radiator, cast iron .....	30
Radiator, finned tube .....	20
Unit heater .....	10
Nurse call system .....	15
Oxygen, gas, air piping .....	25
Paging system .....	15
Plumbing, composite .....	25
Fixtures .....	20
Piping .....	25
Pump .....	15
Water heater, commercial .....	15
Water storage tank .....	20
Sprinkler and fire protection system .....	25
Fire alarm system .....	20
Fire pump .....	20
Sprinkler system .....	25
Tank and tower .....	25
Sewerage, composite .....	30
Piping .....	25
Sump pump and sewerage ejector .....	10
Telephone system .....	20
Vacuum cleaning system .....	15

*Other Fixed Equipment*

Built-in bench, bin, cabinet, counter, shelving .....	20
Conveying system .....	15
Generator set .....	20
Hood, fume .....	20
Sink and drainboard .....	20
Sterilizer, built-in .....	20



## STUDY CASE

Chart "A" is depictive of a project whose cost of \$973,879 was originally intended to be depreciated as a composite over a life of 40 years. The resulting depreciation of the straight line basic would have been \$24,347 per year.

### CHART "A" — COMPOSITE METHOD

METHOD #	1	
METHOD	STR LINE	TOTAL
TAX LIFE	40.000	DEPRE-
FIRST YEAR	1980	CIATION
COST	\$973,879	\$973,879
% OF TOTAL	100.000	100.000
1980	24,347	24,347
1981	24,347	24,347
1982	24,347	24,347
1983	24,347	24,347
1984	24,347	24,347
1985	24,347	24,347
1986	24,347	24,347
1987	24,347	24,347
1988	24,347	24,347
1989	24,347	24,347

However, after diligent study and "after the fact" cost estimating, the following components could be identified and their respective costs associated:

### COMPONENT

Building Excavation & Foundation	
Building Shell Structure	
Building Structural Framing	
Building Roof (Waterproofing)	
Building Interior Finishes (1)	
Building Interior Finishes (2)	
Building Interior Finishes (3)	
Plumbing and Sewerage	
Heating, Ventilation & A.C.	
Electrical Power Distribution	
Electrical Lighting Fixtures	
Fire Protection System	
Built-in Furnishing	
(1) Concrete Block Partitioning (Core)	
(2) Drywall & Steel Partitioning, Ceiling and Floor Finishes	
(3) Painting, Wallcovering & Decor	

Chart "B" demonstrates the results in the maximization of depreciation through componentizing, that is depreciation on an annual basis of \$33,252 as opposed to that taken on the previously stated composite basis.

To demonstrate the impact of such an increase in the depreciation, chart "C" is offered which delineates the Present Value of this increase in benefits. Column #3 would be that which will be derived by a non-taxable health care facility when being reimbursed by a "third party" provider and the taxable facility can experience those same benefits plus a tax benefit as indicated in column #7.

The method to present this detailed information when the need is known at the beginning of a project can be obtained from the original estimates prepared to bid the project with refinements to present the physical property facts as built.

When the request comes at the end of the project and the above original estimates will not serve the purpose or are not available, other methods will have to be undertaken.

### METHOD OF PROCEDURE

The methodology suggested follows professional engineering and standard cost-estimating procedures. Those property units for which the cost can be specifically identified and related directly to an invoice or a purchase order should be costed directly. However, if a property unit or group of property units was a portion of an overall cost, the total cost should be allocated to the several property units on the basis of applicable material and labor costs, plus a normal allowance for contractor's overhead and profit. Indirect costs for the total project should be allocated to each of the property units identified. Examples of such indirect costs are architectural fees, building permit costs, and license fees.

1. Property units are defined based on considerations of materiality, identifiability, and controllability as shown in AHA Table 1.
2. Quantity takeoffs of labor and materials pertaining to individual property units are developed from the engineering

wisconsin architect/may, 1981



drawings and specifications and from other contract information.

3. Unit prices for labor and materials are obtained as follows:

- a. those invoices providing unit prices pertaining exclusively to a single property unit are matched to the specific quantity takeoff.
- b. those invoices providing unit prices pertaining to labor and materials for several property units are allocated to the quantity takeoffs for those property units.
- c. labor and material prices, for which no specific invoice price can be related, are estimated using recognized cost-estimating manuals of unit

prices. These are referenced as estimated prices from:

Building Cost File  
Means  
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The direct project cost obtained from totaling takeoff quantities times unit prices is then balanced to the actual direct project cost incurred by adjusting all estimated unit prices.

4. The final step in arriving at property unit costs is an allocation of indirect costs for the total project to each of the property units identified. Examples of such indirect costs are architectural fees, building permit costs and license fees.

As demonstrated herein, the benefits of compliance far

outweigh the effort needed to preform the component approach to the maximization of depreciation. With this in mind, the construction team should be investigating the owners future need at the nativity of the construction to insure that all members of that team will contribute the necessary information concerning their area of responsibility within the project.

Being aware of the customers need is the watchword to good business practices and therein, future success.

*Mr. Neiman is a consulting appraiser to Valuation Research Corporation and principal associate of Neiman and Associates.*

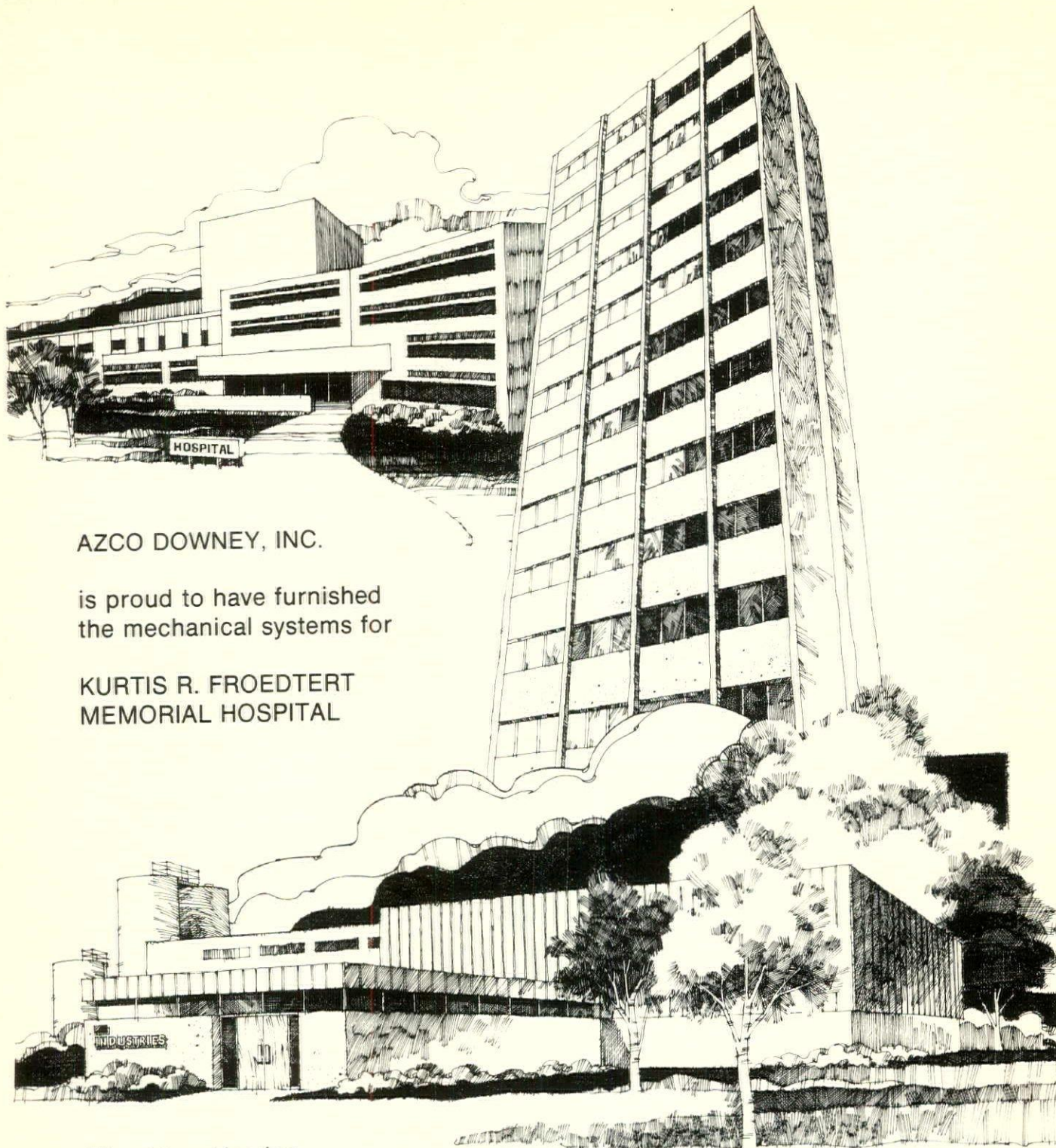
#### CHART "B" — COMPONENT METHOD

METHOD #	1	2	3	4	5	6	TOTAL
METHOD	STR LINE	STR LINE	STR LINE	STR LINE	STR LINE	STR LINE	DEPRE- CIATION
TAX LIFE	55.000	45.000	30.000	20.000	15.000	12.000	
FIRST YEAR	1980	1980	1980	1980	1980	1980	
COST	319,792	141,933	195,308	209,255	99,271	8,320	973,879
% OF TOTAL	32.837	14.574	20.055	21.487	10.193	.854	100.000
1980	5,814	3,154	6,510	10,462	6,618	693	33,252
1981	5,814	3,154	6,510	10,462	6,618	693	33,252
1982	5,814	3,154	6,510	10,462	6,618	693	33,252
1983	5,814	3,154	6,510	10,462	6,618	693	33,252
1984	5,814	3,154	6,510	10,462	6,618	693	33,252
1985	5,814	3,154	6,510	10,462	6,618	693	33,252
1986	5,814	3,154	6,510	10,462	6,618	693	33,252
1987	5,814	3,154	6,510	10,462	6,618	693	33,252
1988	5,814	3,154	6,510	10,462	6,618	693	33,252

#### CHART "C" — VALUE OF BENEFITS

YEAR	(1) COMPONENT DEPRE- CIATION	(2) COMPOSITE DEPRE- CIATION	(3) DIF- ERENCE	(4) TAX SAVINGS @ 46 %	(5) 10.0% O. V. FACTOR	(6) P. V. OF TAX SAVINGS	(7) CUM. P.V. OF TAX SAVINGS
1980	33,252	24,347	8,905	4,096	.9535	3,906	3,906
1981	33,252	24,347	8,905	4,096	.8668	3,551	7,457
1982	33,252	24,347	8,905	4,096	.7880	3,228	10,685
1983	33,252	24,347	8,905	4,096	.7164	2,934	13,619
1984	33,252	24,347	8,905	4,096	.6512	2,667	16,287
1985	33,252	24,347	8,905	4,096	.5920	2,425	18,713
1986	33,252	24,347	8,905	4,096	.5382	2,204	20,918
1987	33,252	24,347	8,905	4,096	.4893	2,004	22,922
1988	33,252	24,347	8,905	4,096	.4448	1,822	24,744
1989	33,252	24,346	8,905	4,096	.4044	1,656	26,401





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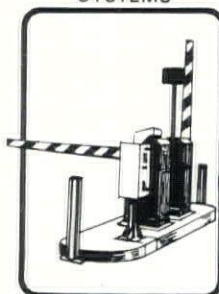
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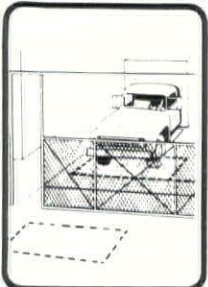
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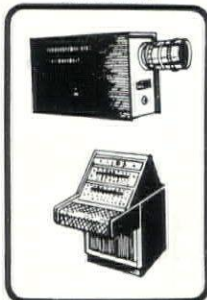
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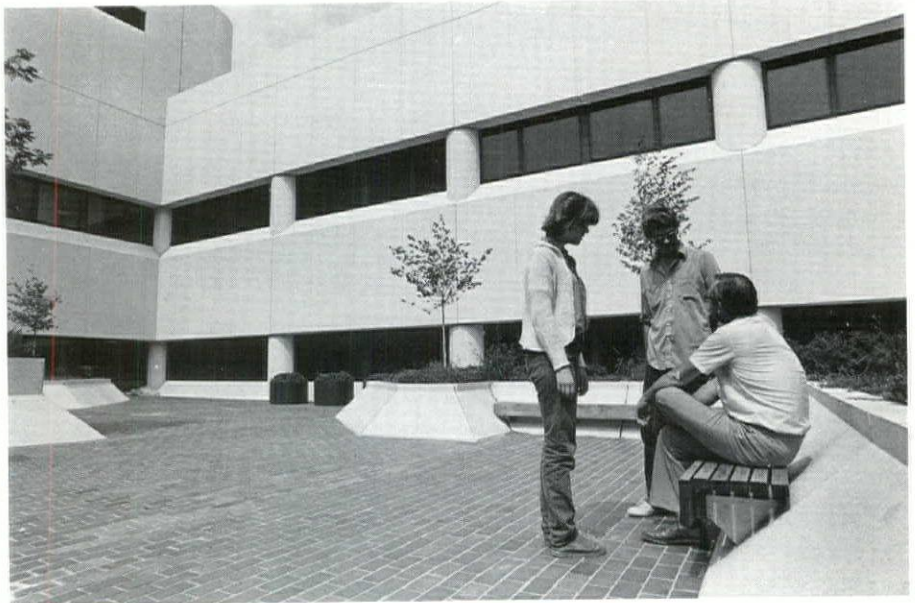
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# Froedtert Hospital's Innovative Design

By James King and Elizabeth Bagwell



The new Froedtert Memorial Lutheran Hospital is a five story teaching, research and referral hospital, located on the 240 acre Milwaukee Regional Medical Center campus, is a symbolic departure from traditional concepts. But then, Froedtert is not a traditional hospital either. It is a core teaching and referral facility for the Medical College of Wisconsin with 13 medical and surgical specialty services, clinical research laboratories and a number of teaching conference rooms.

The non-traditional role of Froedtert was recognized in the early planning stages by Stone, Marraccini, and Patterson, of San Francisco, and Brust-Zimmerman, of Milwaukee, joint venture architects for the \$43,000,000.00 project. The venture was a team relationship. Stone, Marraccini, and Patterson held the responsibility for the medical planning and interior development. Their in-house health care consultants were an important component of the planning team. Brust-Zimmerman was heavily involved in the exterior design and site planning with responsibility for total interior furniture, furnishings, signage and finishes.

Looks are a little deceiving in the approach to the new Froedtert Hospital. The five story structure is really 10 levels because of an innovative architectural concept called building systems design. One of the unique elements of this system is the interstitial space a floor between each of the five patient floors. It houses all support electrical and mechanical systems such as plumbing, heating and cooling ducts, oxygen, nitrous oxide, and other gas lines as well as telephone cable. This design creates flexibility to add, move or repair major systems for the floors immediately below without disturbing patients or services to patients.

Like other hospitals based on this building systems design concept, Froedtert is conceived as a collection of "building blocks" known as service modules which can be assembled in a variety of ways to produce buildings of differing configurations.

The modules are independent in terms of hospital function and also in terms of their mechanical function. This allowed the architect to manipulate and assemble the modules in the best way to

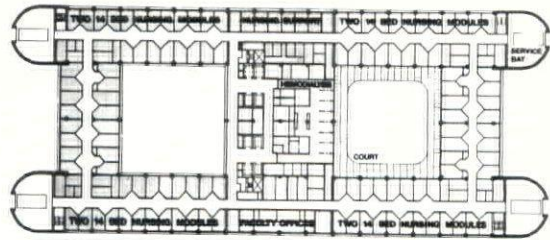
achieve a suitable plan for Froedtert.

Service modules are standardized to allow the greatest flexibility in combining them as "building blocks". The nursing unit is the determinant of module size, because it is the most repetitive element in a hospital, and because its functional and space requirements are the most pervasive and demanding. At Froedtert, service modules are 10,000 to 15,000 square feet. The overall configuration is based on 14-bed flexible modules, with contiguous modules forming 28-bed and 56-bed units.

Each service module contains: A service zone, the space where service lines run above the ceiling of the functional zone; a service bay, a specially designed chamber enclosing the end of each floor which houses mechanical equipment; and a functional zone, the area of each floor where hospital activities take place.

The interstitial space, or service zone, is sufficient to allow a maintenance worker to walk upright. Routing of mechanicals adheres to a rigid plan to provide





the utmost predictability for maintenance and future modification. All services run parallel to the girders (the long dimension of the building). Rights of way are preserved for installation of future fittings.

The service bays on the east and west ends of the building house 23 energy recovering air handling systems. One unit provides service to one quadrant on each floor. These energy recovering units recirculate air from within the building reducing costs of heating and cooling.

The service bay is the "home base" for mechanical equipment for each floor and is wide enough to allow all necessary lines to run into the service zone. Exterior openings in the service bay permit installation and removal of equipment. Each service bay, a full story high, is connected with the one above it and provides for vertical distribution of chilled water, steam lines and electrical feeders.

The hospital's overall design resembles two squared blocks joined in the center by a patient support unit. Each block has interior open space to provide outside exposures for all patient rooms. Two patio areas are located off the main lobby and another, fully landscaped, is on the fourth floor in the "east" block.

Froedtert hospital as a teaching and research facility required building flexibility to allow constant modifications to meet changing needs and demands. All interior walls can therefore be removed to form new configurations.

The plan integrates architectural, structural, mechanical and electrical functions much more closely than is the case in conventional buildings. The concept is more likely that of a submarine or a space vehicle, whose highly technical nature dictates close coordination of all elements.

The building systems concept was developed by Stone, Marzaccini, and Patterson in a four-year study for the Veterans Administration Hospitals and reached fruition just as the time that Froedtert was considering construction. The goals on the concept's designers seemed to match well the concerns of Froedtert's administrators and board. These goals were:

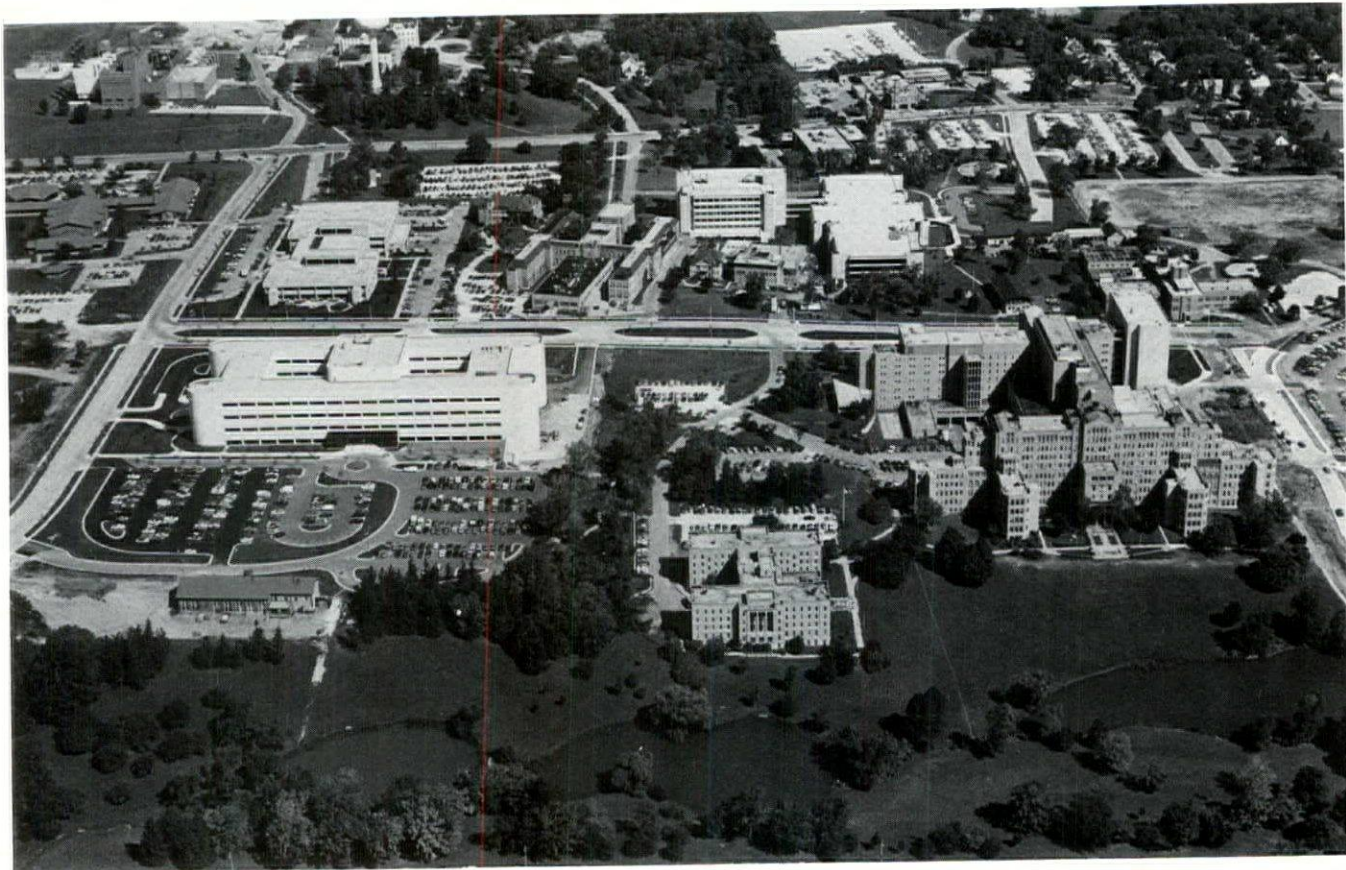
- to allow for adaptability to various conditions of site, climate and hospital programs

- to reduce hospital design time and gain the resulting cost benefits.
- to permit easier remodeling and more flexible use of existing buildings to adapt to new conditions
- to permit ease of maintenance and access to mechanical services and thus reduce operating costs.

The concept of building systems design, in meeting these goals, could be applied to any climate or seismic zone, and promised to reduce the complexity and cost of hospital design and construction. It seemed exactly suited to Froedtert's needs.







A key client concern was patient comfort. The building is designed to encompass a complex patient care system concept. Basic features of this system are: a central area communication system, no nursing stations which allows nurses to spend a majority of their working time in patient rooms, all single patient rooms with pass-through patient supply cabinets, completely centralized distribution of medications, and a central supply system. Each floor has its own administrator, dietician and housekeeping center.

Froedtert is the first hospital based on the concept of building systems design to be built outside of California. Because of

the severity of Wisconsin winters, special efforts were made to reduce the hospital's energy demands. In the design of the service zones, provision was made to recapture heat from exhaust air and to recirculate it. Energy conservation was also considered in the design of the building's shell: The window area was reduced, double glazed windows were used, and extra insulation was added in the walls, intersitial space and roof.

In another modification of the system for Wisconsin's climate, the central space modules at Froedtert are heated and ventilated from centrally located service bays and a fan room

on the roof rather than from equipment based in the service bays at the ends of the floors.

Although Froedtert has been open less than a year, it seems likely that it will benefit from the advantages that led the board and administrators to choose this new design concept. Based on the experience of the hospital's architect in applying the system elsewhere, positive conclusions may be drawn:

1. Adaptability — The independence of each service module allows remodeling or retrofitting of the whole service module or any space within it without disruption of other service modules. Space



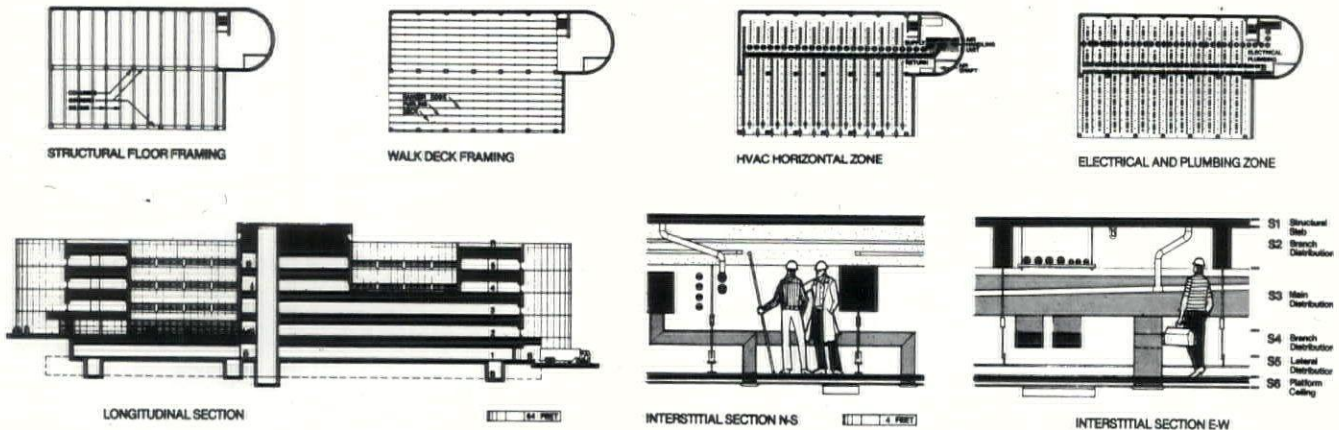
## References:

Development Study, V.A. Hospital Building System, prepared by Stone, Marraccini, and Patterson with joint venture firm of Building Systems Development, Inc. Published by the U.S. Government Printing Office, 1972, Order Number 5100-0062, Superintendent of Documents, Washington, D.C. 20402.

**Architectural Record** magazine, June 1972, "Building Systems Research for V.A. Applied in Both Public and Private Hospitals," George Agron and James Borthwick, Stone, Marraccini, and Patterson.

**Architectural Record**, September 1973, "Application of the V.A. Hospital Building System to the Design of the Loam Linda V.A. Hospital," George Agron, Stone, Marraccini, and Patterson.

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is reserved in service zones and service bays for introduction of future equipment. Materials can be brought in or out without disturbing functional zones.

2. Improved hospital performance — The ease of service maintenance eliminates disruption of hospital functions for servicing. Logistics and circulation problems have been analyzed and avoided; movement of people and goods has been improved. In addition, the service floors provide an acoustical barrier; they prevent sound transfer from room to room and muffle service-generated noise.
3. Design considerations — Modular planning expedites the design effort. The free space within service modules allows maximum flexibility of use of functional space. *Intewisconsin architect/may, 1981*

gration of such concerns as functional planning, fire safety planning and transport planning is enhanced by application of building systems design.

4. Construction considerations — The clarity of the design makes it easier to produce accurate and complete construction documents. In a conventional building, there are bound to be some questions over the location of pipes, conduits, ducts, and other service elements. In building systems design, fewer of these conflicts arise. Construction is thus more efficient. It allows some projects to be completed ahead of schedule.
5. Cost considerations — It had been assumed that constructing hospitals based on the building systems design

plan would be more expensive than conventional construction. However, on a cost-per-square-foot basis, such hospitals compare favorably with hospitals of similar size and function built to similar standards at the same time. Savings are achieved by the elimination of interference between service systems, the opportunity for storage and assembly of work in the service zone simultaneously with work in the functional zone, the substantial reduction in scaffolding and the uniformity and repetition of work from module to module.

*James King — Director of Public Relations, Froedtert Memorial Lutheran Hospital, Milwaukee, Wisconsin.*

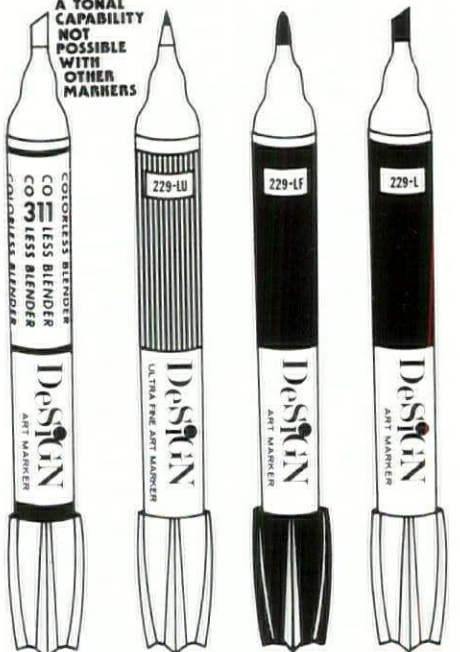
*Elizabeth Bagwell — Staff Assistant, Marketing Support Services, Stone, Marraccini, and Patterson, San Francisco, California.*



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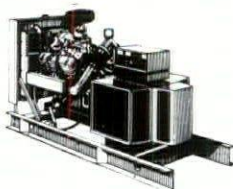
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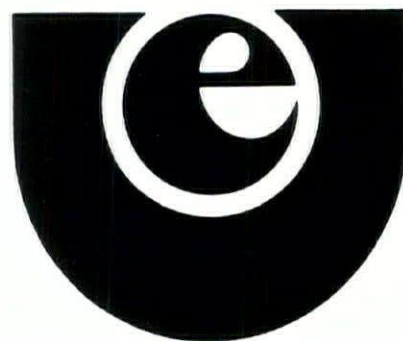
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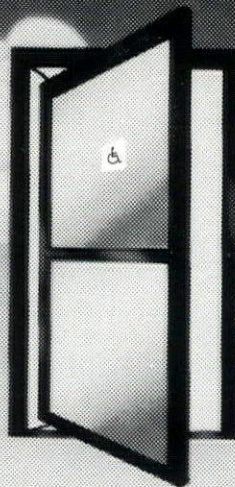
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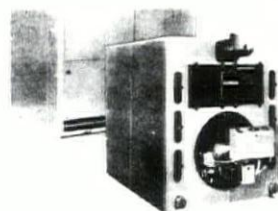
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# SOCIETY NEWS

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## **ARCHITECTS FOR PRESERVATION, RESTORATION, ADAPTIVE USE**

A list of architects compiled in response to a questionnaire circulated among WSA members has been compiled and is available to interested clients seeking architectural assistance in restoration, remodeling, adaptive use, and preservation related projects.

The questionnaire was distributed to WSA members at the request of the WSA Committee on Historic Resources. A special thanks is appropriate to Mike Kennedy, AIA and Jim Sewell, AIA for their efforts in compiling the information submitted and preparing the appropriate information.

This list will be distributed to perspective clients who contact the WSA office seeking architectural assistance in matters pertaining to preservation, restoration, or adaptive use. Additionally, copies will be distributed by the Wisconsin State Historical Society in response to similar inquiries.

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## **THANKS LARRY**

A manufacturer's representative called the WSA office seeking additional information about the possibility of exhibiting at the Convention or buying an advertisement in the Wisconsin Architect. He had been referred to us by Larry Kassens, AIA, who had indicated that both the Convention and magazine were excellent forms for educating architects on products or systems which they might consider using or specifying. Have you recently thanked an exhibitor or advertiser? Have you recently directed a potential exhibitor or advertiser to the WSA office recommending that they consider the Convention or magazine? Larry Kassens did and his efforts are appreciated. Support the WSA by thanking exhibitors and advertisers.

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## **GUIDELINES FOR ARCHITECTURAL DESIGN COMPETITIONS**

The WSA office is receiving increasing inquiry regarding guidelines or rules for Design Competition. Design competitions have been a matter of concern to the AIA since its founding, and continue to be a topic of interest and concern to the profession.

The current social and economic climate has prompted the AIA to undertake a new approach to design competitions which stress fair conduct on the part of all participants and the establishment of equitable relationships between the client and competitors.

The AIA has published Guidelines for Architectural Design Competitions, which should be reviewed by members and clients before a determination is made as to whether to proceed in this direction. In addition to publishing this Guideline, the AIA offers its assistance to any individual or organization contemplating the selection of an architect by design competition.

These Guidelines are dated November, 1976 and can be ordered by calling Karen at the WSA office and requesting AIA document number 6-J332.



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**ARCHITECT-  
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OUTING**

Mark your calendars for June 9, 1981, the date of the WSA's Annual Architect-Exhibitor Golf Outing. The outing is planned by the WSA for its members and for those companies or individuals that exhibited at the 1981 WSA Convention.

The WSA provides one free green fee to exhibitors for each exhibit space. WSA members may purchase green fees for themselves and employees. A Smorgasbord dinner in the evening will be free to exhibitors, members of their organization, architects who are WSA members, and employees on the staff of WSA members. The Smorgasbord will start at 7:00 p.m.

This year's golf outing will be held at Lac Labelle Golf Club in Oconomowoc, Wisconsin. The deadline for registration is June 1, 1981. Registration materials have already been sent to all members. However, if you have misplaced them, please contact the WSA office.

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**MEMBERSHIP  
ACTIONS**

STANFORD C. SMITH, was approved for ASSOC. Membership in the Southwest Wisconsin Chapter.

MICHAEL SZCZAWINSKI, AIA was approved for AIA Membership in the Southeast Wisconsin Chapter.

RAYMOND E. ROLE, AIA was approved for AIA Membership in the Southwest Wisconsin Chapter.

BRUCE M. KRIVISKEY, was approved for ASSOC. Membership in the Southeast Wisconsin Chapter.

ROBERT D. COOPER, AIA was approved for AIA Membership in the Southeast Wisconsin Chapter.

JOHN W. MEYER, AIA was approved for AIA Membership in the Southwest Wisconsin Chapter.

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**13  
WAYS  
TO  
KILL  
AN  
ASSOCIATION:**

1. Stay away from meetings.
2. If you do come, find fault.
3. Better still, clam up until it's over, then sound off on how things really should be done.
4. Decline office or appointment to a committee.
5. Get sore if you are not nominated or appointed.
6. After you are named, don't attend board or committee meetings.
7. Do not work if you can help it. When the 'old reliables' pitch in, accuse them of being a clique.
8. Oppose all banquets, parties and shindigs as being a waste of the member's time and money.
9. If everything is strictly business, complain that the meetings are dull and the officers are a bunch of old sticks.
10. Never accept a place at the head table.



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11. If you aren't asked to sit there, threaten to resign because you aren't appreciated.
12. Don't rush to pay your dues. Let the directors sweat; after all, they wrote the budget.
13. Read mail from headquarters only now and then; don't reply if you can help it.

Each of us is guilty of at least one of these actions at one time or another. As a member, your goal should be to *SPEAK UP* and *PARTICIPATE*. ASA needs your suggestions and cooperation. Volunteer your opinions and assistance. Each of us has something to contribute no matter how small. Every little bit helps us grow as individuals and as an organization.

---

**ARCHITECT  
NOT  
LIABLE  
FOR  
WORKMAN'S  
INJURIES**

Wisconsin's supreme court has ruled that the state's safe place statute imposes a duty on an architect for the safety of a general contractor's employee **only if the architect had a right of supervision and control of the construction site**. Looking to the contract in question, the court held that the architects were not in control of the premises, and, therefore, owed no duty to the contractor's employee. *Hortman v. Becker Construction Company, Inc.* (1979).

Two architectural firms were retained as an architectural consortium for an addition to a hospital. While spreading gravel, an employee of the general contractor was hit by a piece of lumber which apparently flew off the top of the building under construction. The architects, the general contractor and certain subcontractors were made parties to the workman's suit to recover damages for his injuries. A trial court ruled for the architects, and the workman appealed.

**Under the owner-architect agreement, the architect was not to be responsible for "construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work . . .,"** but was to provide a full-time project representative at the construction site. The project representative was to see that the construction was completed according to specifications, both with respect to the quality of the materials and the quality of the workmanship. Unless specific exceptions were established in written instructions from the architect, however, the project representative was not to advise on any aspect of safety precautions or programs. Testimony indicated that it was the general contractor's responsibility to see that materials on the job site were cleaned up.

The state supreme court resolved the issue of the architects' liability by looking to the owner-architect contract. The court said, "A person owes a duty under the safe place statute only if he has the right of supervision and control." Because the architects' contract did not create a duty for the architects to supervise or control construction, the judgment for the architects was affirmed.

There is a moral to this story . . . use the AIA Documents. The contract language that relieved the architect of this potential liability is found in the STANDARD FORM OF AGREEMENT BETWEEN OWNER AND ARCHITECT (AIA Document B 141). These documents can be purchased from the WSA Office. You can pay us now or pay your attorney later.



---

## PEOPLE AND PLACES

The Milwaukee firm of Blake-Huettenrauch has changed its name to BHS Architects and Peter J. Schuyler, AIA, and Frank G. Pletcher, AIA, have recently become partners in the firm.

Harold A. Peckham has been elected to the position of Corporate Vice President of Tavarez & Associates Architects, Inc. Mr. Peckham, who recently joined the Tavarez organization, was also named Chief Architect for the Milwaukee office and in this position will be in charge of architectural design and business development.

Tavarez & Associates Architects, Inc. of Madison and Milwaukee has announced that Mr. Robert A. Prindiville has recently passed the State Architectural Examination.

The Architects Section of the Examining Board of Architects, Professional Engineers, Designers and Land Surveyors have elected H. James Gabriel, AIA, as Chairman and Art Shannon as Vice-Chairman. Mr. Shannon is this public member.

?????



Name the six people shown in this photograph dated 2/25/56 and win a free subscription to the Wisconsin Architect.

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## ISSUANCE OF CERTIFICATES

Every once in awhile a client brings a claim against a design professional when defective work is discovered after payment, when overpayments have been made, or when subcontractors or suppliers are unpaid. In many instances this kind of claim rises from the client's "understanding" that the architect incorrectly "certified" payment.

In many instances the route of this misunderstanding is the lack of awareness on the part of the owner that the design professional cannot conduct detailed inspection and testing at the time of each progress payment. When the certificates for progress payment are issued, there is no guaranteed certainty that the work conforms or that all payments have been made in full to subcontractors.

An architect that uses the AIA form has some protection in that the AIA space A201 has language which seeks to avoid the appearance that the architect is guaranteeing that the contractor has performed in accordance with the contract document.

Unfortunately, there appear to be clients whose reasonable expectations of professional service conflict with language in the contract. These clients believe that the certificate represents that the work to date has been properly performed.

A simple way of attempting to resolve this situation is to direct to the client's attention the contractual definition of what the certificates represent. This bit of preventative action may educate the client to the proper roll that the design professional maintains in contract administration.





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April 30, 1981

Mr. Walter E. Zoller, President  
Wisconsin Society of Architects  
615 East Washington Avenue  
Madison, Wisconsin 53703

Dear Mr. Zoller:

Thank you for your letter in which you expressed the concerns of the Wisconsin Society of Architects about the proposed temporary moratorium on major hospital and nursing home construction. As soon as I had the opportunity, I did indeed want to get back to you.

This moratorium has been proposed because of the explosive rises in health care costs. These costs have had a dramatic effect on Wisconsin's Medicaid program and an equally significant impact on such nongovernmental payors for health care services as major insurers and employers, as well as union labor health and welfare funds. A good part of this increase is attributable to increased capital expenditures for health care institutions (hospitals and nursing homes account for 80 percent of our Medicaid expenditures).

I note your reference to the state's seven health systems agencies. The proposed moratorium would make use of the expertise of these community-based organizations to develop area hospital plans and long-term care plans which would be used after the moratorium to review proposed health care institution capital expenditures. No additional layer of state bureaucracy nor any additional state employees are called for in the proposed moratorium.

I am pleased to see that your organization is prepared to cooperate with state government in working to hold down health care costs. I can assure you that you will find our state agencies most anxious to enlist your help in this effort. Joint governmental-private effort is essential in meeting critical issues such as containing health care costs.

Once again, thank you for sharing your views with me.

Sincerely,

*Lee Sherman Dreyfus*  
Lee Sherman Dreyfus  
GOVERNOR

ljh

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Ever have any aspirations to be an author? Provide information, inspire debate, gain recognition, etc.? Now is your chance. The Editorial Board of the Wisconsin Architect solicits your submissions as they relate to matters of mutual interest to your colleagues.

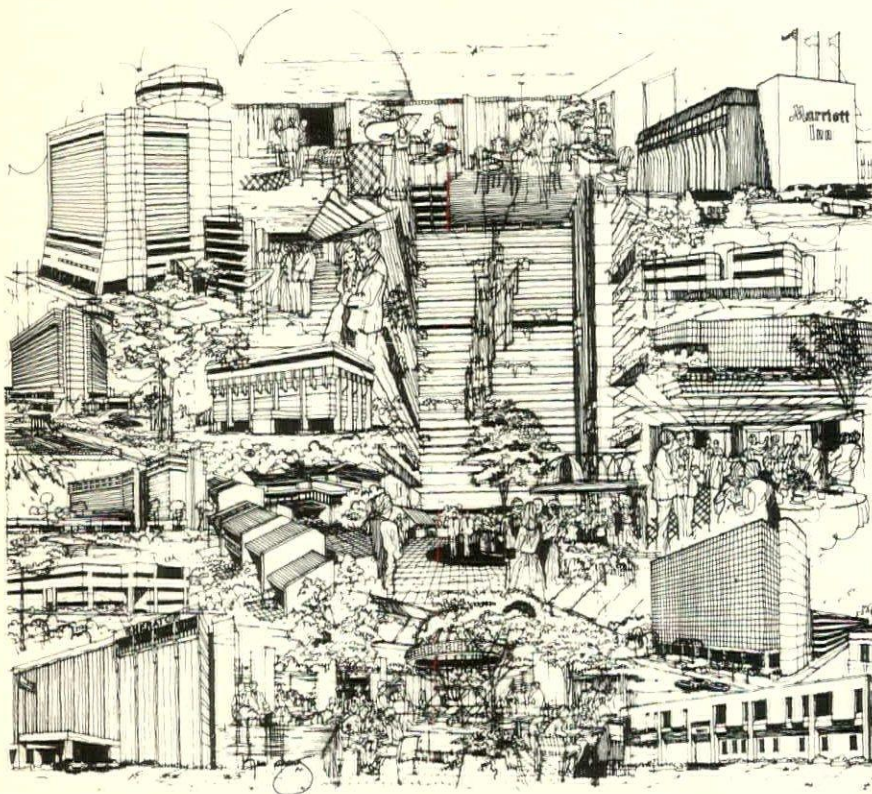
Whether it's a report on a Chapter activity, a dirty book (about architecture), observations or comment about new procedures (BEPS, etc.), or any other matter that you feel is appropriate, submit your articles to the WSA office for consideration by the Wisconsin Architect Editorial Board.

If your vanity will allow it, please enclose a black and white photograph of yourself as well as any other graphics or pictures which you feel will enhance the article. The deadline for submittal is "at your convenience".

**HONOR  
AWARDS**

No, you didn't miss the deadline for registering to compete in the 1981 Honor Awards Program. The Honor Awards Program has been scheduled to coincide with Architecture Week (in October).

There will be a mailing to all members in early June detailing the application procedures for the 1980 Honor Awards Program. Judging is scheduled to take place in August, and we look forward to increased participation by the membership in this program.



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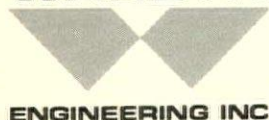
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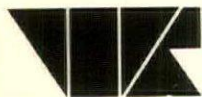
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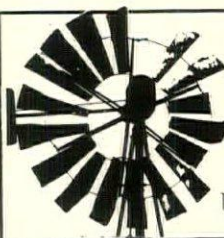
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